CLAIMS

What is claimed is:

1   1.   An apparatus comprising:

2   a dedicated internet radio device including,

3   a display to display a currently selected one of a plurality of virtual

4   frequency identifiers in a fixed number of display positions,

5   a memory to store said plurality of virtual frequency identifiers, each of

6   said plurality of virtual frequency identifiers including a fixed

7   number of fields that encode with an integer value a different

8   identifying attribute of internet radio stations, wherein the sizes of

9   at least some of said fields vary between different ones of said

10   plurality of virtual frequency identifiers;

11   a selector; and

12   a processor coupled to said display, said memory, and said selector to

13   select different ones of said plurality of virtual frequency

14   identifiers as said currently selected virtual frequency identifier.

1   2.   The apparatus of claim 1 wherein each of said fields is independently alterable to

2   perform said selection.

1   3.   The apparatus of claim 1 wherein said fixed number of fields includes a region

2   code field and a format code field that respectively encode different geographic regions

3   and different radio station formats, and wherein said fixed number of fields also includes

4   a station code field that encodes different internet radio stations within each of said

5   different geographic regions and radio station formats.

1   4.   The apparatus of claim 3 wherein:

2   said display includes a first line to display said currently selected virtual

3   frequency identifier and one of the name of the geographic region, the

4   name of the radio station format, or radio station identification information

5   of said currently selected virtual frequency identifier.

1   5.   The apparatus of claim 4 wherein:

2   each of said fields of said currently selected virtual frequency identifiers is

3   independently changeable to perform said selection; and

4   said display to display the one of the name of the geographic region, the name of

5   the radio station format, and the ration station identification information of

6   the field currently selected for changing.

1   6.   The apparatus of claim 4 wherein said display includes a second line to

2   selectively display one of a location name and a radio station description of said radio

3   station identified by said currently selected virtual frequency identifier.

1   7.   The apparatus of claim 4 wherein said display includes a second line to

2   selectively display one of an artist name and a song title of the currently playing song.

1   8.   The apparatus of claim 1, wherein the display is a non-graphical

2   alphanumeric display.

1   9.   An apparatus comprising:

2   a dedicated internet radio device including,

3   a display to display a currently selected one of a plurality virtual frequency

4   identifiers in a fixed number of display positions;

5   a database to store said plurality of virtual frequency identifiers each

6   including a region code field, a format code field, and a station

7   code field that collectively fit within said fixed number, and

8   wherein the size of said fields vary between certain ones said

9   plurality of virtual frequency identifiers;

10   a selector; and

11   a processor coupled to said display, said database, and said selector to

12   select different ones of said plurality of virtual frequencies as said

13   currently selected virtual frequency identifier.

1   10.   The apparatus of claim 9, wherein different ones of said plurality of virtual

2   frequency identifiers have different sizes of said fields but total field contents of any

3   given one of said plurality of virtual frequency identifiers does not exceed said fixed

4   number of display positions.

1   11.   The apparatus of claim 9, wherein the contents of said region code field drives the

2   size of said fields.

1   12.   The apparatus of claim 9, wherein each of said fields is independently alterable to

2   perform said selection.

1   13.   The apparatus of claim 12, wherein the contents of said region field for different

2   ones of said plurality of virtual frequencies identifies are on a per country basis.

1   14.   The apparatus of claim 13, wherein said dedicated internet radio device further

2   comprises:

3   names of said countries, wherein said display is also to display the name of said

4   country corresponding to said currently selected virtual frequency

5   identifier when said region code is being changed as part of said selection.

1   15.   The apparatus of claim 14, wherein said dedicated internet radio device further

2   comprises:

3   names of a plurality of predefined radio station formats, wherein the contents of

4   said format code fields identify different ones of said plurality of

5   predefined radio station formats; and

6   wherein said display is also to display the name of said radio station format

7   corresponding to said currently selected virtual frequency identifier when

8   said format code is being changed as part of said selection.

1   16.   The apparatus of claim 9, wherein said dedicated internet radio device further

2   comprises:

3   radio station identification information of radio stations, wherein the contents of

4   said station code fields identify different radio stations; and

5   wherein said display is also to display the radio station identification information

6   for said radio station corresponding to said currently selected virtual

7   frequency identifier when said station code is being changed as part of

8   said selection.

1   17.   The apparatus of claim 16, wherein said dedicated internet radio device further

2   comprises:

3   names of countries and names of a plurality of predefined radio station formats,

4   the contents of said region field for different ones of said plurality of

5   virtual frequencies identify different ones of said countries, the contents of

6   said format code fields identify different ones of said plurality of

7   predefined radio station formats; and

8   wherein said display is also to display the name of said country corresponding to

9   said currently selected virtual frequency identifier when said region code

10   is being changed as part of said selection, said display is also to display

11   the name of said radio station format corresponding to said currently

12   selected virtual frequency identifier when said format code is being

13   changed as part of said selection.

1   18.   The apparatus of claim 9 wherein said region code field and said format code field

2   respectively encode different geographic regions and different radio station formats, and

3   wherein said station code field encodes different internet radio stations within each of

4   said different geographic regions and radio station formats.

1   19.   The apparatus of claim 18 wherein:

2   said display includes a first line to display said currently selected virtual

3   frequency identifier and one of the name of the geographic region, the

4   name of the radio station format, or radio station identification information

5   of said currently selected virtual frequency identifier.

1   20.   The apparatus of claim 19 wherein:

2   each of said fields of said currently selected virtual frequency identifiers is

3   independently changeable to perform said selection; and

4   said display to display the one of the name of the geographic region, the name of

5   the radio station format, and the ration station identification information of

6   the field currently selected for changing.

1   21.   The apparatus of claim 19 wherein said display includes a second line to

2   selectively display one of a location name and a radio station description of said radio

3   station identified by said currently selected virtual frequency identifier.

1   22.   The apparatus of claim 19 wherein said display includes a second line to

2   selectively display one of an artist name and a song title of the currently playing song.

1   23.   The apparatus of claim 9, wherein the plurality of virtual frequency identifiers are

2   integers.

1   24.   The apparatus of claim 9, wherein the display is a non-graphical

2   alphanumeric display.

1   25.   An electronic chip comprising:

2   a processor to be coupled to a display and a selector to select different ones of a

3   plurality of virtual frequency identifiers as a currently selected virtual

4   frequency identifier, each of said plurality of virtual frequency identifiers

5   including a fixed number of fields that encode with an integer value a

6   different identifying attribute of internet radio stations, wherein the sizes

7   of at least some of said fields vary between different ones of said plurality

8   of virtual frequency identifiers but all of said plurality of virtual frequency

9   identifiers can individually be displayed within the same number of

10   integer digits.

11   a storage device, coupled to the processor, to store one or more streaming audio

12   players and a table of one or more mappings of said plurality of virtual

13   frequency identifiers to URLs; and

14   an internet network interface, coupled to the processor, to transmit and receive

15   data via the internet.

1   26.   The electronic chip of claim 25 wherein each of said fields is independently

2   alterable to perform said selection.

1   27.   The electronic chip of claim 26 wherein said fixed number of fields includes a

2   region code field and a format code field that respectively encode different geographic

3   regions and different radio station formats, and wherein said fixed number of fields also

4   includes a station code field that encodes different internet radio stations within each of

5   said different geographic regions and radio station formats.

1   28.   A machine-readable medium that provides instructions, which when executed by

2   a set of one or more processors, cause said set of processors to perform operations

3   comprising:

4   responsive to input, selecting one of a plurality of virtual frequency identifiers as

5   a currently selected virtual frequency identifier, each of said plurality of

6   virtual frequency identifiers including a fixed number of fields that encode

7   with an integer value a different identifying attributes of internet radio

8   stations, wherein the sizes of at least some of said fields vary between

9   different ones of said plurality of virtual frequency identifiers but each of

10   said plurality of virtual frequency identifiers can be displayed within the

11   same number of digits;

12   displaying the currently selected virtual frequency identifier;

13   accessing a corresponding URL for said currently selected virtual frequency

14   identifier; and

15   playing an audio stream from said URL.

1   29.   The machine-readable medium of claim 28 wherein said selecting includes:

2   independently altering at least one of said fields.

1   30.   The machine-readable medium of claim 28, wherein said fixed number of fields

2   includes a region code field and a format code field that respectively encode different

3   geographic regions and different radio station formats, and wherein said fixed number of

4   fields also includes a station code field that encodes different internet radio stations

5   within each of said different geographic regions and radio station formats.

1   31.   The machine-readable medium of claim 30, wherein said displaying includes:

2   displaying on a first line of a display said currently selected virtual frequency

3   identifier and one of the name of the geographic region, the name of the

4   radio station format, or radio station identification information of said

5   currently selected virtual frequency identifier.

1   32.   The machine-readable medium of claim 30, wherein:

2   each of said fields of said currently selected virtual frequency identifiers is

3   independently changeable to perform said selection; and

4   said displaying includes displaying on a first line of a display the one of the name

5   of the geographic region, the name of the radio station format, and the

6   ration station identification information of the field currently selected for

7   changing.

1   33.   The machine-readable medium of claim 32 wherein said displaying includes:

2   displaying on a second line of said display one of a location name and a radio

3   station description of said radio station identified by said currently

4   selected virtual frequency identifier.

1 34. The machine-readable medium of claim 32 wherein said displaying includes:

2   displaying on a second line of said display one an artist name and a song title of

3   the currently playing song.